

Weekly COVID-19 Update in Montana (as of 5/20/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of May 20, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 5/20/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
REPORTED CASES	276,777	1,164	+35%
LABORATORY TESTS	2,813,146	12,735	+12%
HOSPITALIZATIONS	12,008	36	+33%
DEATHS	3,388	3	-57%

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 5/20/2022

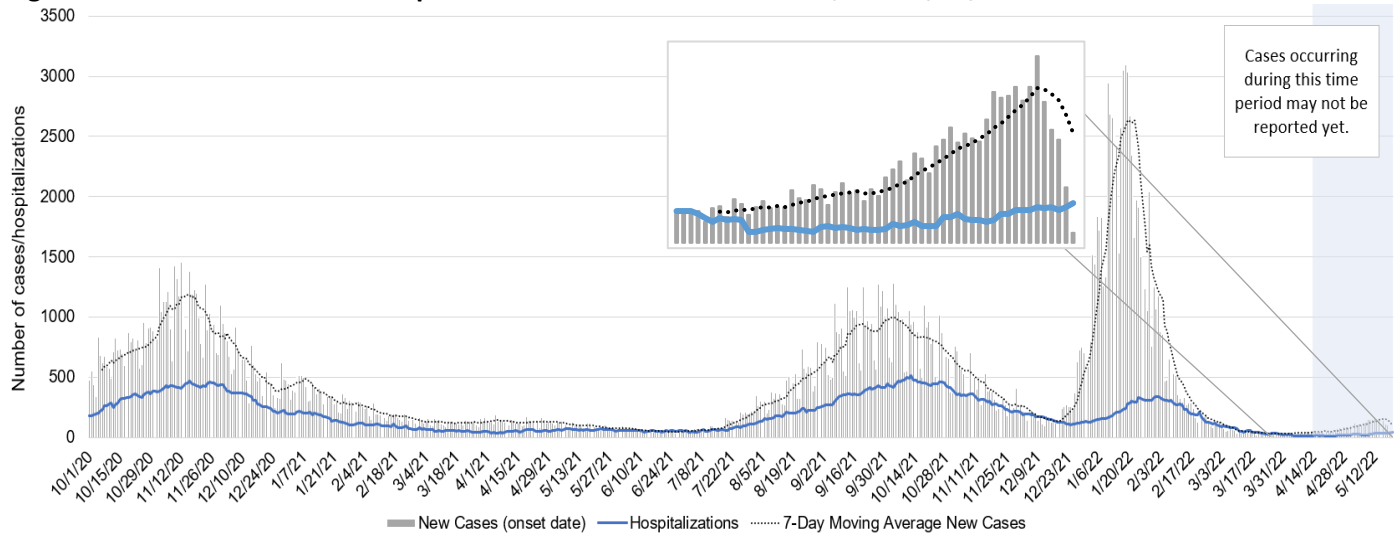


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 5/11-5/24 2022

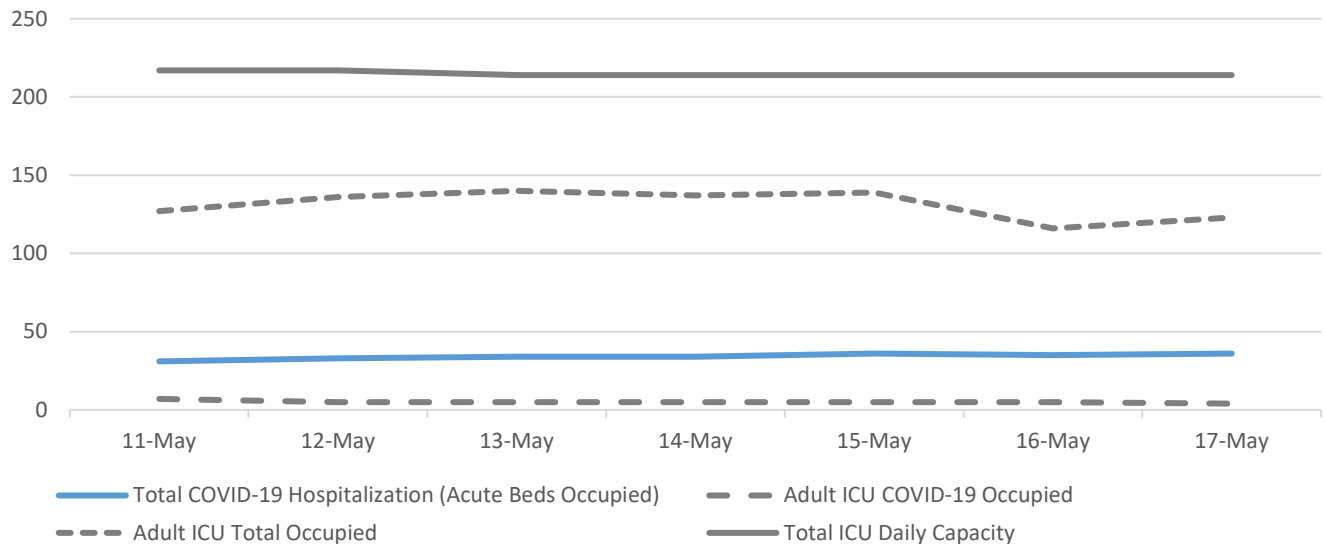
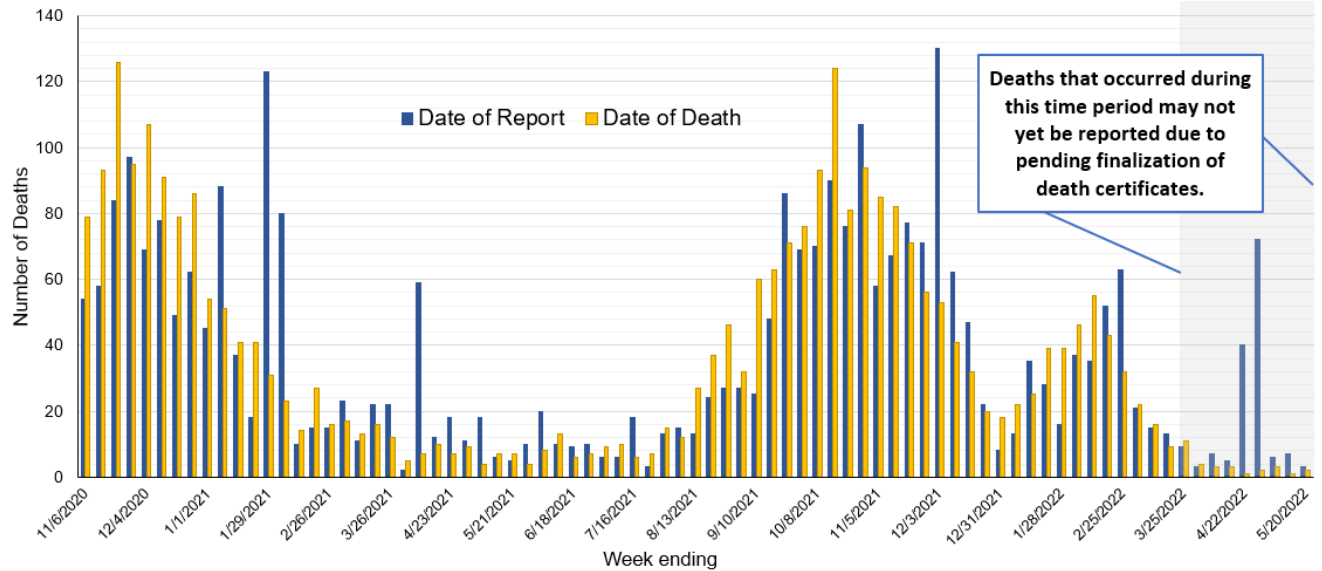


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 5/20/2022



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10th, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,475,801 doses have been given across the state and 55% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 5/20/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 5/6	WEEK ENDING 5/13	WEEK ENDING 5/20*
TOTAL DOSES ADMINISTERED	1,475,801		6,078	6,168	5,052
DOSE 1 ADMINISTERED	635,629	62%	513	515	489
FULLY VACCINATED INDIVIDUALS	565,071	55%	499	450	447

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 4. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 5/20/2022

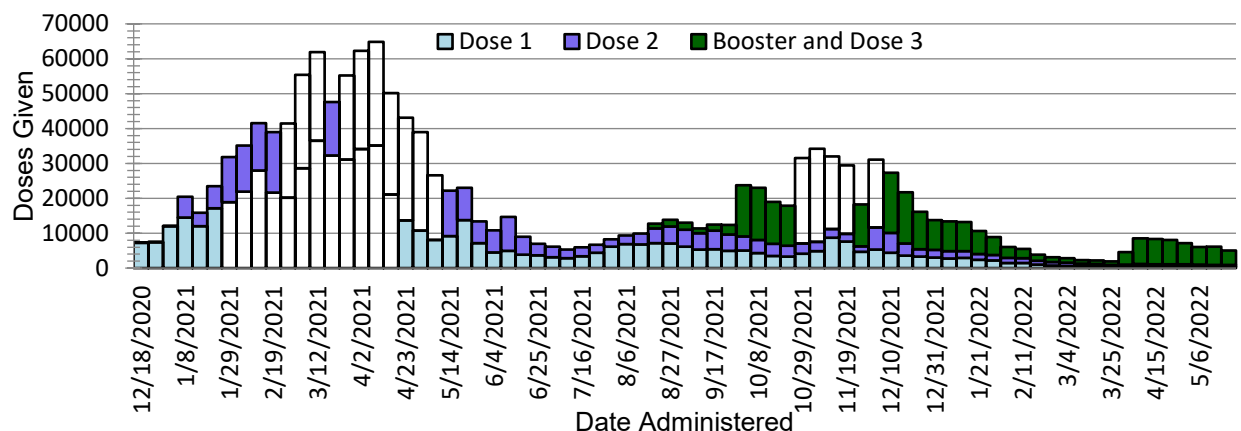
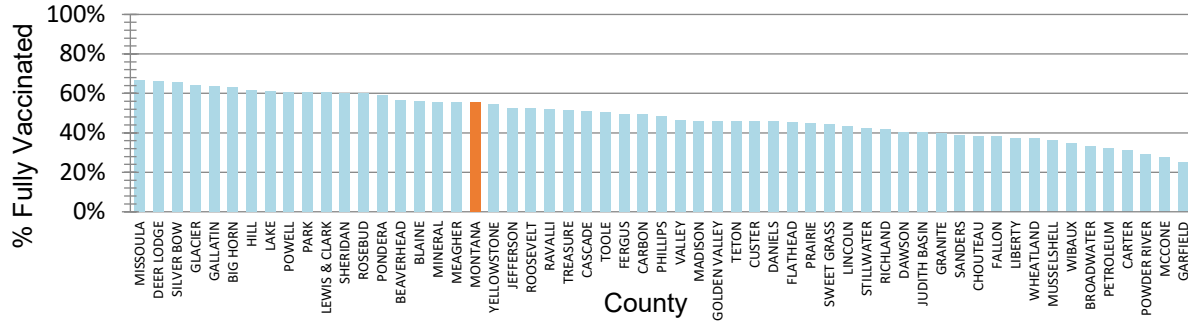


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 5/20/2022



Variant and Breakthrough Cases

Figure 6 displays the number of Montana samples sequenced by week. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all Montana samples sequenced by week. There have been 16,779 samples from Montana that have been sequenced with their lineages reported to GISAID since September 2020. **Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available variant sequencing data.**

As of May 25, there have been 4,289 cases across Montana infected with Omicron variants. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below) which was first detected in Montana on January 30, 2022, BA.2.12.1 (gold, below) which was first identified in Montana on April 19, 2022, and BA.4 (light blue, below) first identified in Montana on May 4, 2022. In the past four weeks, 62 sequences have been reported to GISAID—40 (65%) BA.2, 19 (31%) BA.2.12.1, 2 (3%) BA.1, and 1 (1%) BA.4. Please note only 8 positive samples were collected the week ending May 21, 2022 that were sequenced and reported to GISAID, 4 were BA.2 and 4 were BA.2.12.1. There has been no BA.5 variants detected in specimens from Montana at this time.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 5/21/2022

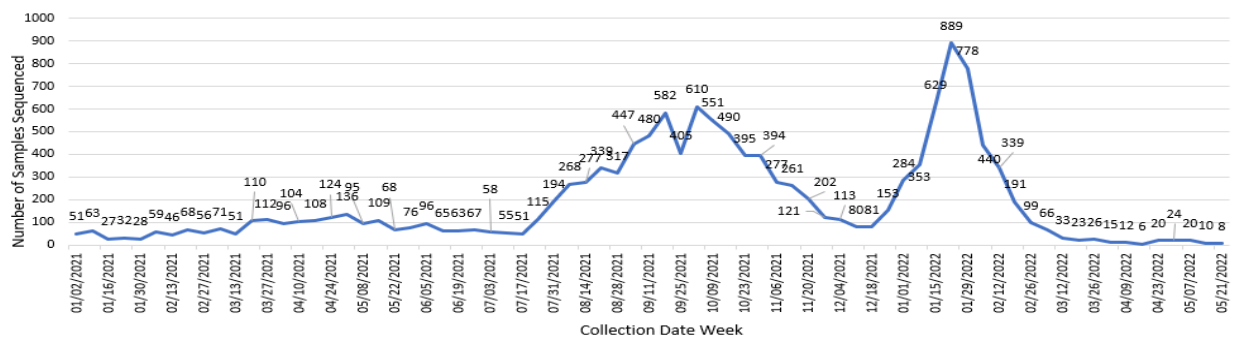
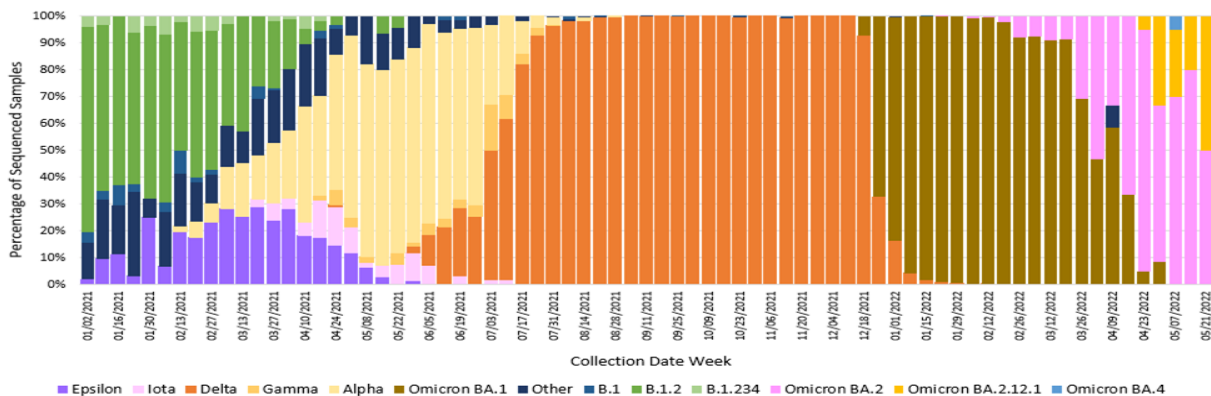


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 5/21/2022



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥ 14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. As of May 24, 2022, Montana reports 46,231 cases of confirmed breakthrough disease, which includes 1,517 hospitalizations and 431 deaths. CDC data from March 2022 show that unvaccinated individuals aged 12 years and older were 1.9 times more likely to become infected with COVID-19, compared to fully vaccinated individuals in the same age group with a booster dose. Additionally, unvaccinated individuals 12 and older had 17 times the risk of dying from COVID-19 compared to fully vaccinated individuals in the same age group with booster doses.¹

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and May 20, 2022** to review vaccination status. Since the beginning of April 2021, 79% of Montanans who were hospitalized and 76% of those who died were unvaccinated at the time of infection (Table 3). Of the 7,163 individuals who were hospitalized during this time period, 141 (2%) were <18 years old, 972 (14%) were 18 to 44 years old, 2,328 (33%) were 45 to 64 years old and 3,722 (52%) were ≥ 65 years old.

Additionally, COVID-19-related hospitalization and death data from **March 26–May 20, 2022** (last 8 weeks) were analyzed to review vaccination status. Fifty percent of Montanans who were hospitalized and 42% of those who died had not received a COVID-19 vaccine (Table 4)[†]. Of the 147 individuals who were hospitalized during this time period, 8 (5%) were <18 years old, 20 (14%) were 18 to 44 years old, 32 (22%) were 45 to 64 years old and 87 (59%) were ≥ 65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to May 20, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	7,163	1,794
UNVACCINATED	5,665 (79%)	1,366 (76%)
VACCINATED (BREAKTHROUGH CASE)	1,498 (21%)	428 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-102 (63)	<1-103 (71)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	7-103 (73)	20-101 (81)

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – March 26 to May 20, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	147	19
UNVACCINATED	74 (50%)	8 (42%)
VACCINATED (BREAKTHROUGH CASE)	73 (50%)	11 (58%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	<1-100 (67)	55-85 (74)
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	19-97 (72)	39-101 (85)

[†]The analysis of hospitalizations and deaths by vaccination status does not include data on booster doses. Booster doses are recommended by the CDC and have been shown to improve protection against hospitalization and death from COVID-19¹.

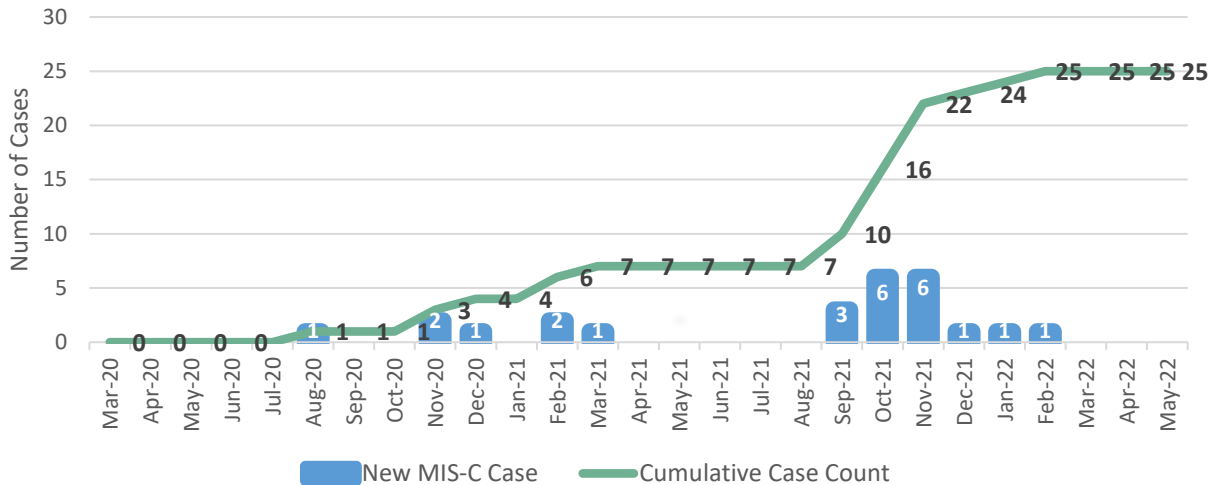
¹ CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status.

<https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>. May 25, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of May 20, 2022, there have been a total of 25 cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 9 years. Eleven cases were female, 14 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 18 of the 25 cases have been reported since September 2021 (Figure 8).

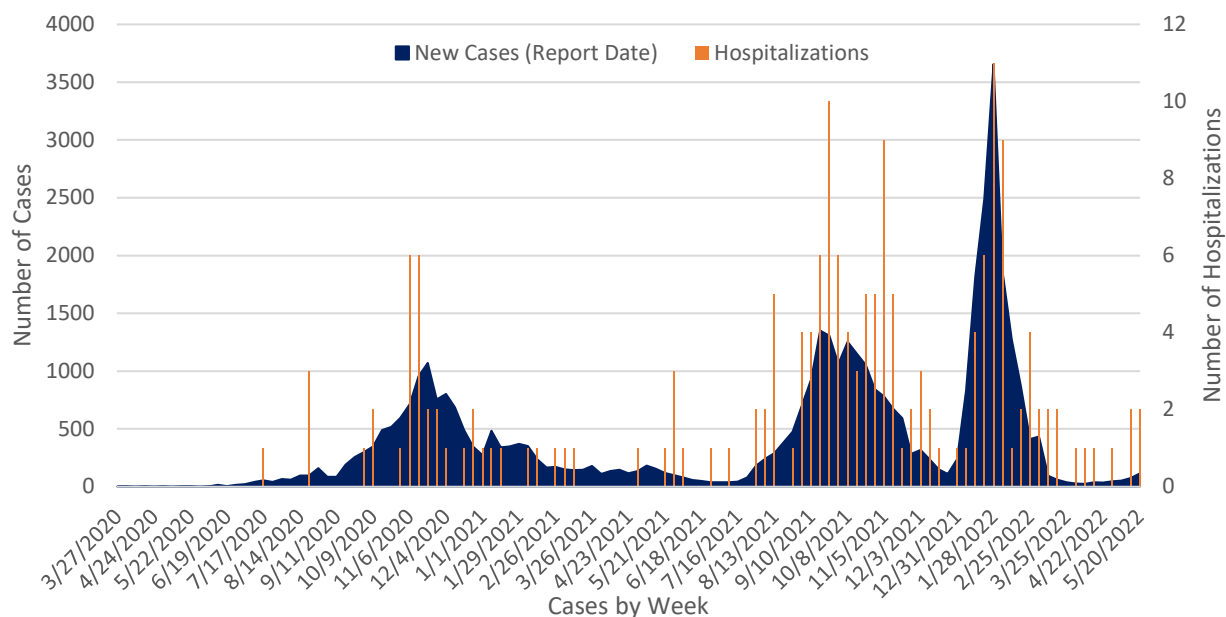
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – May 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 43,294 children <18 years old in Montana diagnosed with COVID-19. Of those, 177 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 114 cases of COVID-19 in children reported during the week of May 14 – May 20, 2022, which is a 50% increase in cases among that age group compared to the previous week. Two hospitalizations in children were reported that week.

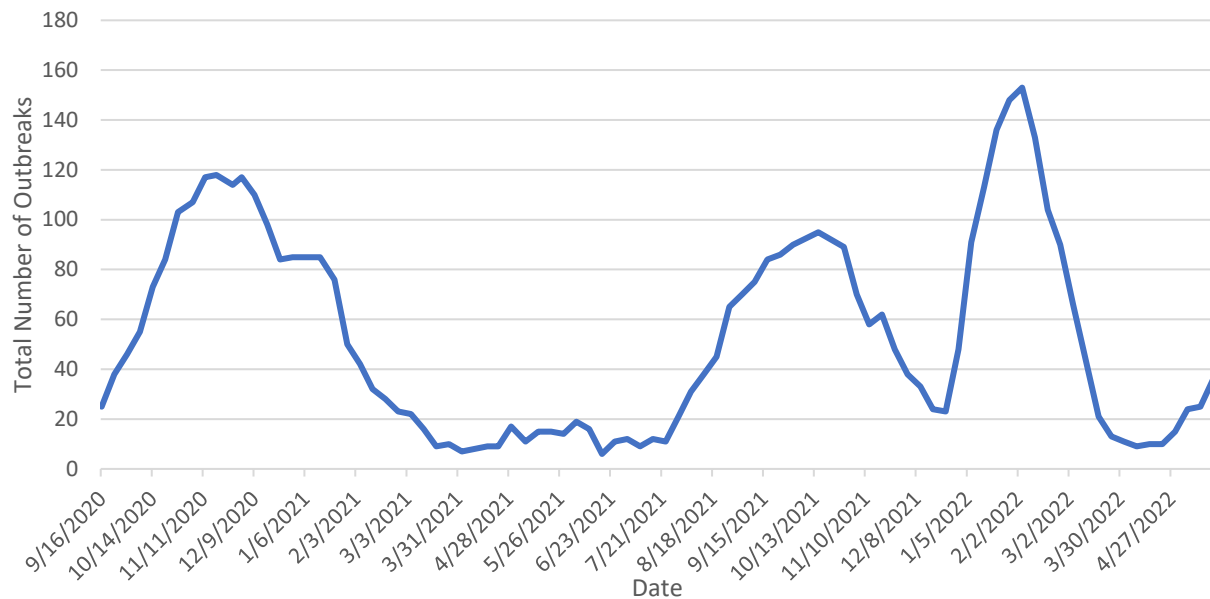
Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – May 20, 2022, Children <18



Assisted Living Facility and Long-Term Care Facility Cases and Hospitalizations

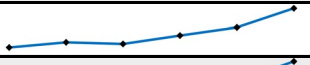
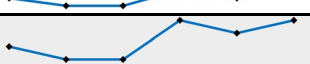
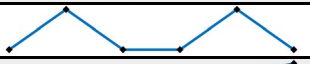
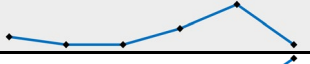
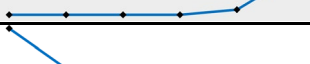
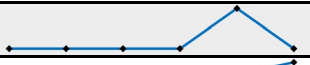
There are 71 long-term care facilities (LTCFs) and 211 assisted living facilities (ALFs) in Montana. As of May 20, 2022, there have been 11,135 cases associated with ALFs and LTCFs since the beginning of the pandemic, which comprises 4% of the total number of COVID-19 cases Montana has reported. There have been 650 COVID-related deaths associated with ALFs and LTCFs in Montana, which accounts for 19% of the COVID-related deaths that Montana has reported since the beginning of the pandemic. Facilities that have identified a case of COVID-19 in a resident or staff member within the last 14 days are considered to be actively responding to an outbreak. There are 36 facilities that are currently responding to a COVID outbreak, which is a 44% increase in active outbreaks compared to the previous week (Figure 10).

Figure 10. Montana ALF and LTCF Outbreaks by Week, September 2020-May 2022



Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	15 Apr	22 Apr	29 Apr	6 May	13 May	20 May	change from previous week*	Trendline
Beaverhead	0	2	2	1	1	6	5	
Big Horn	5	5	4	7	5	5	0	
Blaine	1	3	2	4	0	3	3	
Broadwater	1	1	1	5	1	3	2	
Carbon	8	8	8	6	4	15	11	
Carter	0	1	0	0	1	0	-1	
Cascade	16	18	45	14	51	66	15	
Chouteau	0	1	1	0	0	2	2	
Custer	4	0	2	3	1	1	0	
Daniels	0	0	0	0	0	0	0	
Dawson	1	1	9	6	2	5	3	
Deer Lodge	3	1	0	3	2	8	6	
Fallon	0	1	1	0	2	0	-2	
Fergus	1	1	0	3	0	2	2	
Flathead	16	26	45	87	115	66	-49	
Gallatin	41	64	120	142	221	346	125	
Garfield	0	0	0	0	1	2	1	
Glacier	3	1	5	17	17	17	0	
Golden Valley	0	0	0	0	0	0	0	
Granite	0	1	2	0	1	2	1	
Hill	3	7	1	3	8	11	3	
Jefferson	2	2	0	5	5	10	5	
Judith Basin	1	0	1	1	1	0	-1	
Lake	3	5	17	23	14	22	8	
Lewis and Clark	26	20	24	35	56	76	20	
Liberty	1	0	0	0	0	2	2	
Lincoln	6	21	13	8	9	13	4	
Madison	0	3	0	8	5	13	8	
McCone	0	0	0	0	0	0	0	
Meagher	0	0	0	0	5	6	1	

Missoula	65	82	77	106	133	199	66	
								
Park	6	11	17	22	31	40	9	
								
Phillips	0	0	0	0	0	1	1	
								
Powder River	0	4	3	1	3	4	1	
								
Prairie	0	0	0	0	0	0	0	
								
Richland	0	0	2	4	8	3	-5	
								
Rosebud	1	0	0	2	1	5	4	
								
Sheridan	0	1	0	0	1	0	-1	
								
Stillwater	2	4	2	0	0	1	1	
								
Teton	2	1	1	2	7	2	-5	
								
Treasure	0	0	0	0	0	2	2	
								
Wheatland	2	0	0	0	0	0	0	
								
Yellowstone	60	33	38	80	95	123	28	
								
MONTANA	299	360	474	644	860	1164	304	

**Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.*

County name	Eligible population 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,509	4,444	2,914	5,141	12,867	61%	57%
BIG HORN	11,975	8,285	7,164	3,080	7,538	18,529	69%	63%
BLAINE	6,044	3,771	3,158	1,733	3,371	8,662	62%	56%
BROADWATER	6,092	2,395	1,765	1,125	2,009	5,285	39%	33%
CARBON	10,476	5,614	4,817	3,010	5,171	13,441	54%	49%
CARTER	1,141	379	335	189	357	903	33%	31%
CASCADE	76,124	43,345	34,529	20,923	38,639	98,797	57%	51%
CHOUTEAU	5,430	2,239	1,898	1,477	2,085	5,614	41%	38%
CUSTER	10,692	5,406	4,384	2,623	4,896	12,413	51%	46%
DANIELS	1,559	745	656	376	712	1,777	48%	46%
DAWSON	8,071	3,568	2,949	1,837	3,265	8,354	44%	40%
DEER LODGE	8,887	6,404	5,307	3,860	5,890	15,571	72%	66%
FALLON	2,646	1,089	961	522	1,011	2,572	41%	38%
FERGUS	10,495	5,524	4,799	3,245	5,202	13,568	53%	50%
FLATHEAD	99,993	52,369	41,182	26,421	45,523	119,972	52%	46%
GALLATIN	110,900	83,591	64,333	39,606	70,622	187,530	75%	64%
GARFIELD	1,188	318	252	109	295	679	27%	25%
GLACIER	12,447	10,555	7,404	3,714	7,968	21,673	85%	64%
GOLDEN VALLEY	788	393	330	184	362	907	50%	46%
GRANITE	3,218	1,463	1,177	725	1,282	3,365	45%	40%
HILL	14,914	9,957	7,764	4,585	9,164	22,306	67%	61%
JEFFERSON	11,819	6,772	5,774	3,942	6,187	16,488	57%	52%
JUDITH BASIN	1,880	812	695	462	759	1,969	43%	40%
LAKE	29,280	20,209	16,695	10,708	17,936	47,612	69%	61%
LEWIS & CLARK	66,257	45,450	37,232	25,389	40,120	108,071	69%	61%
LIBERTY	2,234	864	736	528	836	2,128	39%	37%
LINCOLN	19,480	9,508	7,725	5,110	8,436	22,343	49%	43%
MADISON	8,589	4,434	3,528	2,438	3,966	10,400	52%	46%
MCCONE	1,562	452	421	268	430	1,141	29%	28%
MEAGHER	1,726	1,011	872	581	957	2,464	59%	55%
MINERAL	4,302	2,637	1,927	1,430	2,394	5,994	61%	56%
MISSOULA	115,881	85,403	71,161	47,917	77,254	204,481	74%	67%
MUSSELSHELL	4,458	1,750	1,419	812	1,622	3,981	39%	36%
PARK	15,969	11,242	8,750	5,803	9,684	25,795	70%	61%
PETROLEUM	483	166	143	90	156	399	34%	32%
PHILLIPS	3,675	1,913	1,469	1,032	1,778	4,414	52%	48%
PONDERA	5,389	3,576	2,805	1,688	3,189	8,069	66%	59%
POWDER RIVER	1,588	503	408	226	465	1,137	32%	29%
POWELL	6,534	4,244	3,177	2,136	3,966	9,557	65%	61%
PRAIRIE	994	471	420	292	445	1,183	47%	45%
RAVALLI	42,972	24,672	19,907	14,358	22,319	58,937	57%	52%
RICHLAND	10,310	4,525	3,587	2,081	4,280	10,193	44%	42%
ROOSEVELT	9,918	5,818	4,377	2,450	5,177	12,645	59%	52%
ROSEBUD	8,160	5,470	4,372	2,490	4,897	12,332	67%	60%
SANDERS	11,641	5,070	4,222	2,681	4,525	11,973	44%	39%
SHERIDAN	3,075	1,940	1,716	1,163	1,849	4,819	63%	60%
SILVER BOW	33,267	23,958	20,527	13,544	21,891	58,029	72%	66%
STILLWATER	9,451	4,374	3,468	2,371	4,024	10,213	46%	43%
SWEET GRASS	3,523	1,714	1,327	946	1,554	3,987	49%	44%
TETON	5,819	3,135	2,219	1,450	2,669	6,804	54%	46%
TOOLE	4,391	2,361	1,780	930	2,207	5,071	54%	50%
TREASURE	623	432	298	185	321	915	69%	52%
VALLEY	6,931	3,409	2,760	1,918	3,225	8,087	49%	47%
WHEATLAND	2,035	809	700	444	755	1,953	40%	37%
WIBAUX	898	357	301	148	310	806	40%	35%
YELLOWSTONE	153,378	93,249	77,620	45,757	83,985	216,626	61%	55%
MONTANA	1,020,663	635,629	514,146	326,026	565,071	1,475,801	62%	55%